



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,654	12/30/2003	Doug Van Thorre	1865.013US1	5076
21186	7590	10/04/2005		
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH			EXAMINER	
1600 TCF TOWER			WEIER, ANTHONY J	
121 SOUTH EIGHT STREET				ART UNIT
MINNEAPOLIS, MN 55402				PAPER NUMBER
			1761	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/707,654	VAN THORRE, DOUG
	Examiner Anthony Weier	Art Unit 1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on 8/15/05 is acknowledged. This is not found persuasive because the inventions are distinct and require separate search strategies as set forth in the Restriction Requirement mailed 7/15/05.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 112***

2. Claims 1-13 and 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in that it is not clear what is meant by "other fractions of the oil bearing seed" in the last line. More specifically, does this refer to components other than oil which are also retained in the germ?

Claims 9 and 10, involving milling of the kernel, are confusing in that they appear contradict the requirement of claim 1 that the pericarp not be damaged.

Claim 21 is indefinite in that it does not clearly set forth how/when the pericarp/starch fraction in itself is separated from the seed.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 7, 8, 21, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Shi et al.

Shi et al discloses a process wherein dry milled corn kernels are placed in an isotonic solution (inherently within a vessel) wherein the germ fraction of the corn floats to the top (inherently retaining oil) and is separated from the rest of the corn kernel that inherently falls to the bottom (paragraphs 58 and 59).

5. Claims 1-3, 6-9, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Acton.

Acton discloses a process wherein corn kernels are steeped, milled, and then placed in an isotonic solution (inherently within a vessel; starch suspension) wherein the germ fraction of the corn floats to the top (inherently containing oil) and is separated from the rest of the corn kernel that inherently falls to the bottom. It should be noted that the starch suspension is recycled from another portion of the process and would inherently contain fermentable sugars including sucrose leached from the corn during the steeping portion of the process (page 1, lines 1-85).

6. Claims 1, 3, 6, 7, 21, 23, are rejected under 35 U.S.C. 102(b) as being anticipated by Bienenstock.

Bienenstock discloses a process wherein corn kernels are dry milled and then placed in an isotonic solution (inherently within a vessel) wherein the germ fraction of the corn floats to the top and is separated from the rest of the corn kernel that inherently falls to the bottom. It should be noted that the isotonic solution is also recycled (Examples 1 and 3; page 3, lines 20-25).

7. Claims 1-13 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al

Brown et al discloses a process wherein corn kernels are steeped in solution, dry milled, and placed in an isotonic solution within an enclosing vessel, said isotonic solution comprising water and inherently fermentable sugars such as sucrose that originally exist in the corn kernel itself and wherein some of the components of said isotonic solution have been recycled (see the starch/water line from 21), wherein the germ fraction of the corn floats to and is extract from the top of the vessel and is separated from the rest of the corn kernel that falls to and is extracted from the bottom of the vessel (e.g. page 2 and Figure 1). In addition, Brown et al discloses further recovery of oil and protein (basically the remaining components of the germ after starch/water removal; see page 3, lines 12-24), inherent removal of oil from the remaining components of the germ via the silk reel (20) and further processing of the starch/pericarp complex of the seed (devices 18-21). It should be further noted that it appears that the separation of the germ and other kernel contents occurs continuously (see Figure 1).

Art Unit: 1761

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-5 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi et al.

The claims further call for the continuous removal of the germ from above and the continuous removal of the remainder of the oil bearing seed from below the vessel used. However, the concept of providing a continuous process from one this batch or semi-batch is notoriously well known. More specifically, making a process continuous does not add patentability to the claims. See Dow v. Coe, 545 O.G. 905; In re Lincoln et al, 1942 C.D. 386; and In re Korpi, 602 O.G. 672.

If it is shown that Shi et al does not disclose or inherently include an enclosed vessel for treatment, it should be noted that it is notoriously well known to treat items in an enclosed environment, and it would have been further obvious to have performed the isotonic treatment in an enclosed vessel to, for example, avoid processing contaminants.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shi et al taken together with Bienenstock.

Claims 6 further calls for recycling the isotonic solution. However, the concept of reusing or recycling material is notoriously well known as taught for example, by Bienenstock (page 3, lines 20-25), and, absent a showing of unexpected results, it

Art Unit: 1761

would have been further obvious to have recycled the isotonic solution used in Shi et al to, for example, save money.

11. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shi et al taken together with Brown et al.

Although Shi et al further discloses pretreating said corn by dry milling same, Shi et al is silent regarding the addition of water prior to said dry milling. However, it is known to soften corn by steeping prior to grinding as taught by Brown et al, and it would have been obvious to one having ordinary skill in the art at the time of the invention to have included such step to enable easier subsequent grinding and separation steps.

12. Claims 3-5 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Acton.

The claims further call for the continuous removal of the germ from above and the continuous removal of the remainder of the oil bearing seed from below the vessel used. However, the concept of providing a continuous process from one this batch or semi-batch is notoriously well known. More specifically, making a process continuous does not add patentability to the claims. See Dow v. Coe, 545 O.G. 905; In re Lincoln et al, 1942 C.D. 386; and In re Korpi, 602 O.G. 672.

If it is shown that Acton does not disclose or inherently include an enclosed vessel for treatment, it should be noted that it is notoriously well known to treat items in an enclosed environment, and it would have been further obvious to have performed the isotonic treatment in an enclosed vessel to, for example, avoid processing contaminants.

Art Unit: 1761

13. Claims 3-5 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bienenstock.

The claims further call for the continuous removal of the germ from above and the continuous removal of the remainder of the oil bearing seed from below the vessel used. However, the concept of providing a continuous process from one this batch or semi-batch is notoriously well known. More specifically, making a process continuous does not add patentability to the claims. See Dow v. Coe, 545 O.G. 905; In re Lincoln et al, 1942 C.D. 386; and In re Korpi, 602 O.G. 672.

If it is shown that Bienenstock does not disclose or inherently include an enclosed vessel for treatment, it should be noted that it is notoriously well known to treat items in an enclosed environment, and it would have been further obvious to have performed the isotonic treatment in an enclosed vessel to, for example, avoid processing contaminants.

14. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bienenstock taken together with Brown et al.

Although Bienenstock further discloses pretreating said corn by dry milling same, Bienenstock is silent regarding the addition of water prior to said dry milling. However, it is known to soften corn by steeping prior to grinding as taught by Brown et al, and it would have been obvious to one having ordinary skill in the art at the time of the invention to have included such step to enable easier subsequent grinding and separation steps.

Art Unit: 1761

15. Claims 4, 5, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al.

The claims further call for the continuous removal of the germ from above and the continuous removal of the remainder of the oil bearing seed from below the vessel used. However, the concept of providing a continuous process from one this batch or semi-batch is notoriously well known. More specifically, making a process continuous does not add patentability to the claims. See *Dow v. Coe*, 545 O.G. 905; *In re Lincoln et al*, 1942 C.D. 386; and *In re Korpi*, 602 O.G. 672.

#### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-10 and 21-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/605812. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the instant claims recite processing wherein the pericarp and starch are not damaged, it would have been

Art Unit: 1761

well within the purview of a skilled artisan to provide for such processing through use of, for example, low temperature and lack of harsh chemical treatment. It would have been obvious to one having ordinary skill in the art at the time of the invention to have included such processing attribute as a matter of preference.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claims 11-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/605812. Although the conflicting claims are not identical, they are not patentably distinct from each other because although the instant claims recite processing oil, protein, and starch/pericarp complex are separated, it is known to separate such components from corn as taught or suggested, for example, by Brown et al (see Figure 1). Such processing determinations would have been well within the purview of a skilled artisan, and it would have been obvious to one having ordinary skill in the art at the time of the invention to have included such further processing steps as a matter of preference.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

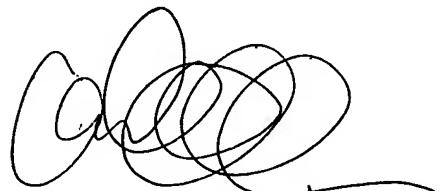
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier  
Primary Examiner  
Art Unit 1761

Anthony Weier  
September 30, 2005

  
9/30/05